

GP 2811



23501

PATENT TRADEMARK OFFICE

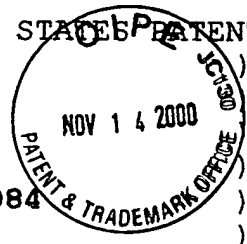
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
In re application of:

STUMBORG, ET AL.

Serial No.: 09/137,084

Filed: August 20, 1998

For: ELECTRONIC DEVICES WITH
BARIUM BARRIER FILM AND
PROCESS FOR MAKING SAME



Atty. Dkt. No.: N.C. 79329

Group Art Unit: 2811

Examiner: H. Vu

#14/C
11/16/00

RECEIVED
NOV 14 2000
OPE/JCWS

AMENDMENT UNDER 37 C.F.R. §1.111

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

NE
Claims
Cancelled

This is a response to the Office Action dated September 27,
2000 in the above-captioned case.

IN THE CLAIMS:

RECEIVED
NOV - 9 2000
LICENSING & REVIEW

1. (Amended) A semiconductor device comprising:
a substrate;
a barrier film having a monolayer of elemental barium atoms on
said substrate; and
a metallic material on said barrier film.

Sub
D17

2. (Three Times Amended) A semiconductor device comprising:
a substrate material having a surface;
a barrier film on said substrate surface, said barrier film
having a layer comprising elemental barium atoms on [attached to]
said surface;
a conductor on said barrier film, said conductor having a
tendency to diffuse into said substrate material if in direct
contact therewith; and wherein said layer comprising elemental
barium atoms serves as a barrier, inhibiting diffusion of the
conductor into the substrate material.

LER